H·S

Notice of Allowability	Application No.	Applicant(s)
	10/735,163	LEUNG, KA Y.
	Examiner	Art Unit
	Patrick G. Wamsley	2819
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. This communication is responsive to		
2. ☑ The allowed claim(s) is/are <u>1-8</u> .		
3. ☑ The drawings filed on 12 December 2003 are accepted by the Examiner.		
<ul> <li>4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> <li>Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.</li> </ul>		
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
<ul> <li>6. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>		
<ul> <li>Attachment(s)</li> <li>1. ☑ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/O Paper No./Mail Date 03/24/2005</li> <li>4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	6. ☐ Interview Summary Paper No./Mail Dat 08), 7. ☐ Examiner's Amendr	e

Art Unit: 2819

## **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: the references of record neither reveal nor render obvious the recited combination including a differential amplifier coupled to a switched capacitor array in a successive approximation register, hereafter SAR, converter, having a common mode driver and a capacitor reference circuit.

U.S. Patent 6,724,248 to Llewellyn discloses a differential amplifier having a SAR engine [152]. U.S. Patent 6,433,724 to Confalonieri et al shows an analog to digital converter, hereafter ADC, having an array of sampling capacitors. U.S. Patent 5,361,037 to Qui provides a differential amplifier [53] and sets of switched capacitors. U.S. Patent 5,235,333 to Naylor et al describes an ADC having a SAR [38] and an array of bit capacitors. U.S. Patent 4,831,381 to Hester discloses a charge redistribution ADC comprising SAR control [26] and a binary-weighted capacitor array.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick G. Wamsley whose telephone number is (571) 272-1814. The official facsimile number is (703) 872-9306. An alternate facsimile number, (571) 273-1814, should only be used for unofficial documents.

Patrick G. Wamsley

March 24, 2005